Attendance: Joe Auchter, Bill Barnes, Bob Barnes, Vincent Chiang, Gene Eplee, Hector Erives,

Shaida Johnston, Gerhard Meister, Chris Moeller, Vince Salomonson, Jungiang Sun,

Gary Toller, Eric Vermote, Zhengming Wan, Aisheng Wu, Jack Xiong

Scheduled Agenda

Item 1: LUT and Code delivery

JX) (1) Terra V4.3.0.9 is a regular delivery for m1 update. (2) Terra V4.3.0.10 is for SDST atmosphere test using DSM RVS on TEB. (3) Terra special smoothed m1 V4.3.0.9_OC is for Ocean Color group testing to prepare for the reprocessing. (4) L1B code delivery Terra V4.3.0_OC and Aqua V4.3.1_OC are for Ocean Color group. These L1B codes can handle both regular and subsetted L1As. Only Ocean Color group will be using these codes.

Item 2: Terra B27 Ch5 and B28 Ch10 status

JX) Band 27 detector 5 remains the same. Band 28 detector 10 is still noisy. Chris sent us some charts about Band 28 on May 28.

(Note: B28 Ch10 QA has been set to "noisy" in V4.3.0.9.)

Item 3: Terra recent RSB and TEB detectors noisy starting on day 158 (June 6) RSB

- JX) Last Thursday, MCST initially reported Terra Band 21 noisy at technical meeting. After that, we found more detectors noisy in TEB as well as in RSB. Here we provide some examples of RSB detector's m1 trending on pages 3-6. There is no systematic pattern for these detectors noise change.
- Bill) There are two changes in the plots; one is the m1 shift, the other is the noise level change. Looks like some detectors jump up, some down.
- VS) Maybe the instrument starts showing degradation after 3-4 years. Questions on whether or not this happened before? Were they in the same configuration? How about Aqua?
- JX) Band 3, for example, some detectors m1 have more noisy patterns after day 158, but some detectors actually become flat. This is not the first time happening recently. It happened before in December's safe hold anomaly with same instrument configuration. (*Note: Similar oscillations reported at Ocean review in Feb.*) This noisy pattern is not instrument temperature related. Some get noisier, some become quiet. It's hard to correct. Aqua has been track once every two weeks and it did not happen like Terra at this time period.
- EV & Bob) Asking if Aqua can do continuous 14 orbits SD door open calibration.
- JX) Open SD door more will cause SD degradation faster. It has to open and close every orbit because of thermal protection. There is also a limit of how many times the SD door can be closed and opened.
- VS & Bill) Talking about potential problem and it has to be approved by HQ.

TEB

- JX) Go to pages 8 and 9 for TEB. Like RSB, Band 21 b1 value is one time change (shift) after day 158. Two of the detectors, Ch1 and 9, have greater shift in b1 but not in NEdT. During days 159 to 162, some detectors of B20 and B21 became noisier, but they came back after day 162. For Band 23, it was less noisy during that period.
- Bill) Noise recovered after day 162, but not the b1 for Band 21.

- JX) On page 10, it shows where the instrument were when Band 21 NEdTs are greater than 0.2K. It happened near the SAA region and the other side of the globe.
- CM) Based on this behavior, do you expect any change of the electronic cross-talk characteristics?
- JX) We have been monitoring this as well. Band 26 also changed this time. We will look more for Band 26. We will probably schedule nighttime day-mode operation to look at the change.

Action: VC will coordinate with CM looking at B26 data set..

- CM) We used to look at SRCA for cross-talk. Have we done that recently?
- JX) No. It takes a long time to do the SRCA cross-talk test on orbit. But we can use some limited SRCA test for that. We also can use lunar data to check that.
- JX) On page 12, Band 30 (LWIR focal plane) detector 2 becomes noisy on day 162. This chart shows how we track the b1 and NEdT change from time to time. All these happened on day 158 and on 162 that maybe SBRS can share anything about the electronics.
- JA) Roger is on the trip. We will look into that but cannot offer any suggestion now. Do you know any pattern that you recognize? or any correlation to instrument temperature? Can you send us detailed charts on page 8?
- Bill) And the correlations with power supply voltage?
- JX) If you (JA) think any telemetry is related, can you suggest and provide IOT the list so they can pull out from their trending. We do not have all the telemetry points here.

Action: VC will send detailed b1 and NEdT charts to JA.

Around the Table

Participant: Jack Xiong – Collection 5 L1B issue

JX) To prepare the collection 5 reprocess, MCST needs input from each Science Team discipline for any suggestion or request about L1B code change. I would like to have your input by middle of July.

GT/EV/SJ) – Exchanging information about the deadline of collection 5.

- Bill) How are you going to do with the m1?
- JX) In collection 5, we will use smoothed m1 for reprocess, and predicted m1 for forward.
- EV) We (Land) only have one concern. That is Band 7's de-striping.

Participant: Chris Moeller – Terra DSM RVS testing issue & De-striping issue

- CM) We are working on the DSM data set. At the MCST workshop during the Science Team meeting, I will present some slides for the de-striping that we going to use in collection 5 for atmosphere.
- EV) I got your email about the de-striping data set. I am waiting for the 500m data.
- JX) MCST workshop will be on second day, July 14, from 7 to 9 PM.

Next MsWG meeting scheduled on June 30, 2004